

Pew Research Center's American Trends Panel
Wave 58
Methodology Report

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Summary

The American Trends Panel (ATP) is a national, probability-based online panel of adults living in households in the United States. On behalf of the Pew Research Center, Ipsos Public Affairs (“Ipsos”) conducted the 58th wave of the panel from December 3, 2019 to December 22, 2019. Wave 58 was primarily administered online, and a total of 3,030 ATP and Knowledge Panel (KP) members (both English- and Spanish-language survey-takers) completed the survey in that mode. Survey weights were created for the online responding sample. The margin of sampling error for weighted estimates based on the full sample is ± 2.94 percentage points.

Sample Definition

The overall target population for Wave 58 was Hispanic, non-institutionalized persons age 18 and over, living in the US, including Alaska and Hawaii. The A total of 4,029 ATP members were included in the sample. The KP sample included 2,006 panelists. For the KP sample, Hispanics who were either born in Mexico or had no more than a high school education were oversampled relative to those who had more than a high-school education and were born outside of Mexico.

KnowledgePanel Methodology Information

KnowledgePanel is the largest online panel that relies on probability-based sampling techniques for recruitment; hence, it is the largest national sampling frame from which fully representative samples can be generated to produce statistically valid inferences for study populations. KP provides samples with the highest level of representativeness available in online research for measurement of public opinions, attitudes, and behaviors. The panel was first developed in 1999 by Knowledge Networks. Panel members are randomly selected so that survey results can properly represent the U.S. population with a measurable level of accuracy, features that are not obtainable from nonprobability panels (for comparisons of results from probability versus nonprobability methods, see Yeager et al., 2011¹).

KnowledgePanel’s recruitment process was originally based exclusively on a national RDD sampling methodology. In 2009, in light of the growing proportion of cellphone-only households, Ipsos migrated to an ABS recruitment methodology via the U.S. Postal Service’s Delivery Sequence File (DSF). ABS not only improves population coverage, but also provides a more effective means for recruiting hard-to-reach individuals, such as young adults and minorities. Households without Internet connection are provided with a Web-enabled device and free Internet service.

¹ Yeager, D., Krosnick, J., Chang, L., Javitz, H., Levendusky, M., Simper, A. and R. Wang (2011). "Comparing the Accuracy of RDD Telephone Surveys and Internet Surveys Conducted With Probability and Non-Probability Samples." *Public Opinion Quarterly*, Winter 2011.

After initially accepting the invitation to join the panel, participants are asked to complete a short demographic survey (the initial *Core Profile Survey*); answers to this survey allow efficient panel sampling and weighting for future surveys. Upon completing the Core Profile Survey, participants become active panel members. All panel members are provided privacy and confidentiality protections.

Questionnaire Development and Testing

The questionnaire was developed by the Pew Research Center in consultation with Ipsos. The web program was rigorously tested on both PC and mobile devices by the Ipsos project management team and Pew Research Center researchers. The Ipsos project management team also populated test data which was analyzed in SPSS to ensure the logic and randomizations were working as intended before launching the survey. The Pew Research Center has a copy of the final instruments in English and Spanish.

Recruitment and Administration of the ATP

Prior to Wave 58, ATP panelists were recruited from three large (n=10,013, n=6,004 and n=3,905), national, overlapping, dual-frame landline and cellphone random-digit-dial (RDD) surveys and two (n=9,396 and n=4,720) national address-based sample (ABS) survey conducted for the Pew Research Center. At the end of each recruitment survey, respondents were invited to join the panel. The first recruitment was conducted from January 23 to March 16, 2014, the second recruitment was conducted from August 27 to October 4, 2015, the third recruitment was conducted from April 25 to June 4, 2017, the fourth recruitment was conducted from August 8, 2018 to October 31, 2018, and the fifth recruitment was conducted August 19, 2019 to October 25, 2019, all in English and Spanish. Sample for the RDD surveys was obtained from SSI and sample for the ABS survey was obtained by MSG. The RDD recruitment surveys were conducted by Abt SRBI.²

The first 20 waves of the ATP featured a simultaneous mixed-mode design, in which panelists who used the Internet and provided an email address participated via self-administered web survey, and adults who did not use the Internet (or did but did not provide an email address) participated via a mail survey (Waves 3-4 and 6-20) or computer-assisted telephone interviewing (CATI, Waves 1 and 5 only). Wave 18 was the first wave where a subset of the non-Internet panelists was converted to web mode. The conversion process involved calling all active mail mode respondents (n=616) and asking them to report their Internet and device

² Visit <http://www.pewresearch.org/methodology/u-s-survey-research/american-trends-panel/> for more information on American Trends Panel recruitment and methodology.

status and then asking them to convert to web. Those who already had the means for taking web surveys were simply asked to convert. Those without the means for taking web surveys (no device and/or Internet access) were offered an Internet-connected tablet computer at no cost to the panelist. Tablets were shipped to the panelists who accepted, and they were given a follow-up call to ensure they understood how to use the tablet to access the ATP surveys through a pre-installed Mobile Panel Application.

Wave 21 was the first wave conducted only in web mode. However, the conversion effort was ongoing through Wave 26. By Wave 26, 238 of 616 (39%) mail panelists had converted to web. Of these, 197 received tablets and 41 made the mode switch using their own devices.

Data Collection Protocol

The data collection field period for Wave 58 was December 3, 2019 to December 23, 2019. Postcard notifications were mailed to all ATP panelists with a known residential address on December 2, 2019.

On December 3, December 4 and December 9 invitations to Wave 58 were sent out in three separate launches: Soft Launch English, Full Launch English and Full Launch Spanish. One-hundred ATP panelists were included in the soft launch, which began with an initial invitation sent in the evening of December 3, 2019. The panelists chosen for the initial soft launch were known responders who had completed previous ATP surveys within one day of receiving their invitation. All remaining English panelists were included in the English full launch and were sent an invitation on December 4, 2019. Spanish full launch invitations were sent out on December 9, 2019.

All panelists with an email address received an email invitation and up to five email reminders if they did not respond to the survey. All ATP panelists that consented to SMS messages received an SMS invitation and up to five SMS reminders.

Invitation and Reminder Dates for Wave 58 Web Panelists

	Soft Launch	Full Launch	Full Launch
	English	English	Spanish
Advance Post Card	December 2, 2019	December 2, 2019	December 2, 2019
Initial invitation	December 3, 2019	December 4, 2019	December 9, 2019
1 st reminder	December 6, 2019	December 7, 2019	December 12, 2019
2 nd reminder	December 9, 2019	December 9, 2019	December 16, 2019
3 rd reminder	December 13, 2019	December 13, 2019	December 18, 2019

4 th reminder	December 17, 2019	December 17, 2019	n/a
5 th reminder/Final reminder	December 20, 2019	December 20, 2019	December 20, 2019

Data Quality Checks

As part of the effort to ensure the highest quality data, the Pew Research Center researchers performed data quality checks to identify any respondents showing clear patterns of satisficing. Pew Research Center removed three ATP respondents from the Wave 58 data, none of those panelists were withdrawn from the panel completely.

Weighting

Survey weights are needed to support reliable inference from the panel to the target population of US adults. The final survey dataset contains a total sample weight variable (WEIGHT_W58). The design of this weight is described below.

Start with the base weights of ATP sample, respondents are weighted to represent the noninstitutionalized Hispanic ages 18+ population with respect to the following characteristics:

- Gender (Male, Female) x Age (18-24, 25-34, 35-44, 45-54, 55-64, 65+)
- Gender (Male, Female) x Education (HS grad or less, Some college, College grad +)
- Age (18-34, 35-54, 55+) x Education (HS grad or less, Some college, College grad +)
- Census Region (Northeast, Midwest, South, West) by Metropolitan Status (Metro, Non-metro)
- Metropolitan status (Metropolitan, Non-metropolitan)
- Accesses Internet by paying a cell phone company or Internet service provider (Yes, No)
- Party ID (Republican, Democrat, Independent/Other/DK/REF)
- Volunteerism (Volunteered, Did not Volunteer)
- Citizenship (U.S. citizen, Not a U.S. citizen)
- Years in U.S. (U.S. citizen, Not a U.S. citizen)
- Country of birth (Born in U.S. (not including unincorporated territories), 0-10 years, 11-20 years, 20+ years)
- Hispanic origin (Mexican, Puerto Rican, Cuban, Spanish, All others)
- Voter registration (Registered, Not registered) x Hispanic origin (Mexican, Puerto Rican, Cuban, Spanish, All others)

The weighting benchmarks are provided by Pew Research Center. Weights are trimmed on the overall level (not separately by form) and scaled to sum to the un-weighted sample size of total respondents.

Weights Definition:

WEIGHT_W58: Wave 58 ATP cases (trimmed weights)

Trimming:

(1%, 99%)

Approximate Design Effect:

	WEIGHT_W58
Overall	2.72

Base Weight

The ATP data was weighted in a multistep process that begins by calibrating the entire panel so that it aligns with the population benchmarks identified in the accompanying table to create a full-panel weight. For ATP waves in which only a subsample of panelists are invited to participate, a wave-specific base weight is created by adjusting the full-panel weights for subsampled panelists to account for any differential probabilities of selection for the particular panel wave. For waves in which all active panelists are invited to participate, the wave-specific base weight is identical to the full-panel weight. The next step in the weighting uses an iterative technique that aligns the sample to population benchmarks on the dimensions listed in the table below. For this wave, additional weighting parameters were added to adjust for citizenship, years in the U.S., country of birth and Hispanic origin.

Calibration to Target Population Controls

In the final stage of weighting, the ATP base weights for the panelists responding to a particular panel survey are calibrated to population benchmarks using raking, or iterative proportional fitting. This adjustment is designed to reduce the risk of nonresponse bias stemming from nonresponse at the various stages of the panel design. The raking dimensions and the source for the population parameter estimates are reported in the table below. All raking targets are based on the non-institutionalized U.S. Hispanic adult (age 18+) population.

Raking Dimensions and Source for Population Parameter Estimates

Raking Dimension^	Source
Gender(2) x Age(6)	2018 American Community Survey
Gender(2) x Education (3)	2018 American Community Survey
Age(3) x Education(3)	2018 American Community Survey

Census Region(4)	2019 Current Population Survey ASEC March Supplement
Metro Status(2)	2019 Current Population Survey ASEC March Supplement
Internet Usage(2)	2018 American Community Survey
Party Affiliation(3)	Weighted estimates among Hispanics from the three most recent monthly surveys conducted for the Pew Research Center for the People & the Press (Mar, Jul, Sep 2019), combined in equal proportion
Volunteerism(2)	CPS Volunteering and Civic Life Supplement 2017
Citizenship(2)	2018 American Community Survey
Years in U.S.(4)	2018 American Community Survey
Country of birth(5)	2018 American Community Survey
Hispanic origin(5)	2018 American Community Survey
Voter registration(2) x Hispanic origin(5)	Hispanics from CPS Voting and Registration Supplement 2018, with Hur-Achen weights, rescaled to include non-citizens in the denominator

^ The numbers of categories (prior to any collapsing from small cell size) are shown in parentheses.

*note that Education is collapsed for "Other/Non Hispanic"

The raking for internet usage was included in the algorithm so that the panel survey estimates reflect the target population with respect to the proportion of people who use the internet and the proportion who do not. In Wave 50, all ATP interviews were completed via self-administered web survey. Therefore, there was a concern that internet users could be over-represented in the survey estimates if this dimension was not controlled for in the raking. To correct for this potential over-representation, panelists who reported at the time of the recruitment survey that they did not use the Internet were used to represent non-Internet users in the raking. Other dimensions that are not typically used in weighting protocols for general population household surveys in the US are volunteering and voter registration. These variables were included in the calibration to adjust for some potential bias due to the over-representation of more politically- and civically-engaged adults of the panel.

Design Effect and Margin of Error

Weighting and survey design features that depart from simple random sampling tend to result in an increase in the variance of survey estimates. This increase, known as the design effect or *deff*, should be incorporated into the margin of error, standard errors, and tests of statistical

significance. The overall design effect for a survey is commonly approximated as 1 plus the squared coefficient of variation of the weights. For this survey, the margin of error (half-width of the 95% confidence interval) incorporating the design effect for full sample estimates at 50% is ± 2.94 percentage points. Estimates based on subgroups will have larger margins of error. It is important to remember that random sampling error is only one possible source of error in a survey estimate. Other sources, such as question wording and reporting inaccuracy, may contribute additional error. A summary of the weights and their associated design effect is reported in the table below.

Design Effect and Effective Sample Size

Weight Variable	Completed Interviews	Approximate Design Effect	Effective Sample Size	Margin of Error (95% confidence level)
WEIGHT_W58	3,030	2.72	1,114	2.94

Dispositions

The survey cooperation rate for Wave 58 was 56.2%. The final table reports the cumulative response rate for web for Wave 58 when all stages of recruitment or responses are taken into account.

Final Dispositions for the Wave 58 Survey

Final Disposition	AAPOR Code ¹	ATP	KP	Total
Completed interview	1.1	2,094	936	3,030
Logged onto survey; broke-off	2.12	64	78	142
Logged onto survey; did not complete any items	2.1121	19	12	31
Never logged on (implicit refusal)	2.11	1,135	930	2,065
Screened out (self-IDd not Hispanic)		77	50	127
Total Panelists in the Wave 58 Survey		3,389	2,006	5,395
Completed interviews	I	2,094	936	3,030
Partial interviews	P			
Refusals	R	1,218	1,020	2,238
Non-contact	NC			
Other	O			
Unknown household	UH			
Unknown other	UO			
Not eligible	NE	77	50	127
Total		3,389	2,006	5,395
AAPOR RR1 = $I / (I+P+R+NC+O+UH+UO)$		61.8%	46.6%	56.2%

Cumulative Response Rate	ATP	KP	Total
Weighted Response Rate to Recruitment Surveys [^]	12.0%	10.1%	11.3%
Percent of Recruitment Survey Respondents Who Agreed to Join the panel, Among Those Invited	53.0%	52.7%	52.9%
Percent of Those Agreeing to Join Who Were Active Panelists at Start of Wave 58	88.2%	44.5%	72.0%
Response Rate to Wave 58 Survey	61.8%	46.6%	56.2%
Cumulative Response Rate for the Wave 58 Survey	3.5%	1.2%	2.4%

[^] Weighted by the total phone numbers used in each survey